

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

1 LISTING OF CLAIMS

2 What is claimed is:

3 We claim:

4 1. (original) An environment aware message delivery system, comprising:

5 a portable message redirection agent carried by a user; and

6 a message delivery service manager for managing candidate message terminals to provide
7 message delivery services for the user, wherein when the user moving over to a place, said
8 message redirection agent cooperates with said message delivery service manager located in the
9 environment around the user to select a message terminal from candidate message terminals in
10 the environment as a target message terminal, and request a message redirection entity to redirect
11 the message addressed to the user to the target message terminal.12 2. (original) A system according to claim 1, wherein said message redirection agent cooperates
13 with said message delivery service manager in the environment around the user by means of a
14 short range wireless communication network.15 3. (original) A system according to claim 2, wherein said short range wireless communication
16 network is Bluetooth wireless communication network.17 4. (original) A system according to claim 1, wherein said message redirection agent cooperates
18 with said message delivery service manager in the environment around the user by means of a
19 USB interface.20 5. (original) A system according to claim 1, wherein said message redirection agent runs in
21 portable pervasive computing devices such as cell phone or PDA.

DOCKET NUMBER: CN920020005US1

-2/17-

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

- 1 6. (original) A system according to claim 1, wherein said message redirection agent runs in Blue
- 2 badges.
- 3 7. (original) A system according to claim 1, wherein said message redirection entity is PBX.
- 4 8. (currently amended) ~~A system according to claim 1, An environment aware message delivery~~
- 5 ~~system, comprising:~~
- 6 a portable message redirection agent carried by a user; and
- 7 a message delivery service manager for managing candidate message terminals to provide
- 8 message delivery services for the user, wherein when the user moving over to a place, said
- 9 message redirection agent cooperates with said message delivery service manager located in the
- 10 environment around the user to select a message terminal from candidate message terminals in
- 11 the environment as a target message terminal, and request a message redirection entity to redirect
- 12 the message addressed to the user to the target message terminal, wherein said message
- 13 redirection agent comprises:
- 14 a message redirection service discoverer for sending service requests to said message delivery
- 15 service manager, and receiving service information from said message delivery service manager;
- 16 a message redirection manager for maintaining a message redirection service list, configuring
- 17 message redirection policy and selecting the target message terminal; and
- 18 a message redirection requester for requesting message redirection service from the message
- 19 redirection entity; and
- 20 wherein said message delivery service manager comprises:

DOCKET NUMBER: CN920020005US1

-3/17-

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

- 1 a service request handler for authenticating the message redirection agent and sending service
- 2 information on-demand to the message redirection agent;

- 3 a service availability detector for checking the status of the candidate message terminals in the
- 4 environment and updating the message delivery service list according to the checking result; and

- 5 a message delivery service configurator for configuring the available message delivery services,
- 6 such as authorizing who can access these services.

- 7 9. (canceled)

- 8 10. (currently amended) A system according to claim 8 9, wherein said message delivery service
- 9 manager further comprises a service advertiser for periodically sending service information to
- 10 nearby message redirection agents.

- 11 11. (original) A system according of claim 1, wherein said message redirection agent comprises
- 12 a message redirection service discoverer for sending service requests to said message delivery
- 13 service manager.

- 14 12. (currently amended) A system according to claim ~~11~~ 8, wherein said message redirection
- 15 agent comprises a message redirection service discoverer for sending service requests to said
- 16 message delivery service manager, and wherein said message delivery service manager
- 17 comprises:

- 18 a service request handler for authenticating the message redirection agent;

- 19 a service availability detector for checking the status of the candidate message terminals in the
- 20 environment and updating the message delivery service list according to the checking result;

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

1 a message delivery service configurator for configuring the available message delivery services,
2 such as authorizing who can access these services, and selecting the target message terminal on
3 behalf of the message redirection agent making the service requests; and

4 a message redirection requester for requesting message redirection service from the message
5 redirection entity.

6 13. (currently amended) A system according to claim 1 any of claims 1-7, wherein said message
7 redirection agent comprises:

8 a message redirection service discoverer for sending service requests to said message delivery
9 service manager, and receiving service information from said message delivery service manager;
10 and

11 a message redirection manager for maintaining message redirection service list, configuring the
12 message redirection policy and selecting the target message terminal.

13 14. (original) A system according to claim 13, wherein said message delivery service manager
14 comprises:

15 a service request handler for authenticating the message redirection agent and sending service
16 information on-demand to the message redirection agent;

17 a service availability detector for checking the status of the candidate message terminals in the
18 environment and updating the message delivery service list according to the checking result;

19 a message delivery service configurator for configuring the available message delivery services,
20 such as authorizing who can access these services; and

DOCKET NUMBER: CN920020005US1

-5/17-

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

- 1 a message redirection requester for requesting message redirection service from the message
- 2 redirection entity according to the request of the message redirection agent.
- 3 15. (original) A system according to claim 1, wherein said system comprises a plurality of
- 4 message delivery service managers, running in various message terminals respectively.
- 5 16. (original) A system according to claim 15, wherein said message redirection agent comprises:
 - 6 a message redirection service discoverer for sending service requests to said message delivery
 - 7 service manager, and receiving service information from said message delivery service manager;
 - 8 a message redirection manager for maintaining message redirection service list, configuring the
 - 9 message redirection policy and selecting the target message terminal; and
- 10 a message redirection requester for requesting message redirection service from the message
- 11 redirection entity.
- 12 17. (original) A system according to claim 16, wherein said message delivery service manager
- 13 comprises a service request handler for authenticating the message redirection agent and sending
- 14 service information on-demand to the message redirection agent.
- 15 18. (original) A system according to claim 17, wherein said message delivery service manager
- 16 further comprises a service advertiser for periodically sending message redirection service
- 17 information to nearby message redirection agents.
- 18 19. (original) A system according to claim 15, wherein said message redirection agent comprises:
 - 19 a message redirection service discoverer for sending service requests to said message delivery
 - 20 service manager, and receiving service information from said message delivery service manager;
 - 21 and

DOCKET NUMBER: CN920020005US1

-6/17-

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

- 1 a message redirection manager for maintaining message redirection service list, configuring the
- 2 message redirection policy and selecting the target message terminal.
- 3 20. (currently amended) A system according to claim 19 ~~8, wherein said system comprises a~~
4 ~~plurality of message delivery service managers, running in various message terminals~~
5 ~~respectively, and wherein said a message delivery service manager comprises:~~
- 6 a service request handler for authenticating the message redirection agent and sending service
7 information on-demand to the message redirection agent; and
- 8 a message redirection requester for requesting message redirection service from the message
9 redirection entity according to the request of the message redirection agent.
- 10 21. (original) An environment aware messages delivery method, comprising the steps of:
 - 11 making information interaction with a message delivery service manager in the environment
12 around a user by a portable message redirection agent carried by the user, wherein interacted
13 information comprises information on candidate message terminals;
 - 14 selecting a message terminal from the candidate message terminals in the environment as a target
15 message terminal; and
 - 16 requesting a message redirection entity to redirect a message addressed to the user to the target
17 message terminal.
- 18 22. (original) A portable message redirection agent, characterized by:
 - 19 when a user mover over to a place, said portable message redirection agent being carried by the
 - 20 user cooperating with a message delivery service manager in the environment around the user,
 - 21 selects a message terminal from candidate message terminals in an environment of the user, as a

DOCKET NUMBER: CN920020005US1

-7/17-

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

1 target message terminal and requests a message redirection entity to redirect a message addressed
2 to the user to the target message terminal.

3 23. (currently amended) A message delivery service manager, characterized by comprising:
4 cooperating means functioning such that when a user moves over to a place and said message
5 delivery service manager in the an environment around the user, cooperating cooperates with a
6 portable message redirection agent carried by the user, selects a message terminal from the
7 candidate message terminals in the environment as a target message terminal, and requests a
8 message redirection entity to redirect the message addressed to the user to the target message
9 terminal.

10 24. (currently amended) An environment aware messages delivery method according to claim 21,
11 further comprising the step of: providing an article of manufacture comprising a computer usable
12 medium having computer readable program code means embodied therein for causing
13 environment aware messages delivery, the computer readable program code means in said article
14 of manufacture comprising computer readable program code means for causing a computer to
15 effect the steps of claim 21 making, selecting, and requesting.

16 25. (currently amended) An environment aware messages delivery method according to claim 21,
17 further comprising the step of: providing a program storage device readable by machine,
18 tangibly embodying a program of instructions executable by the machine to perform method
19 steps for environment aware messages delivery, said method steps comprising the steps of claim
20 21 making, selecting, and requesting.

21 26. (currently amended) A computer program product comprising a computer usable medium
22 having computer readable program code means embodied therein for causing environment aware
23 messages delivery, the computer readable program code means in said computer program product
24 comprising computer readable program code means for causing a computer to effect the
25 functions of claim 1.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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- 2 a message delivery service manager for managing candidate message terminals to provide
message delivery services for the user, wherein when the user moving over to a place, said
message redirection agent cooperates with said message delivery service manager located in the
environment around the user to select a message terminal from candidate message terminals in
the environment as a target message terminal, and request a message redirection entity to redirect
the message addressed to the user to the target message terminal.
- 8 27. (currently amended) A message delivery service manager according to claim 23, further
comprising computer program product means comprising a computer usable medium having
computer readable program code means embodied therein for causing message delivery service
management, the computer readable program code means in said computer program product
comprising computer readable program code means for causing a computer to effect the
functions of claim 23 the cooperating means.
- 14